

***Editing from the
Music Notation Display***

SE-07-0691

Preparing to edit

The Music Notation Display shows up to eight tracks of the current sequence in standard music notation.

You can add, delete or change any note.

Music Notation Display editing instructions

Editing functions

You edit a sequence in the Music Notation Display by first setting the display parameters to match the sequence and selecting the track(s) to be displayed. (See "Displaying a sequence" earlier in this manual.)

Once the selected tracks are displayed correctly, you can add or delete notes, change their pitch or duration and move them forward or backward in time.

MUSIC NOTATION DISPLAY 11/13/87

Move cursor with arrow keys. Toggle instructions with <CTRL>X.
Set duration: type 1,2,4,8,6(16th),9(32nd),<DOT> or set menu.
Set accidental (if needed): Q - sharp; S - natural; Z - flat.
Enter note pitch (A - G); rest R; set menu, or right mouse button.
Add note to chord - <SHIFT> pitch (A-G); Add menu note - <SPACE>
Delete note - Lengthen note - | Pitch up - P Note later - |
Justify note - J Shorten note - | Pitch down - , Note sooner - |

Slaves: 3 Measure #: 1 TimeSig: 4/4 Pitch: C3
Measures: 1 SetClick: 1 Ck: 1/4 Duration: 1/4

Trk 1 Vibes 43
Key C3
Cl: G
Res 16

Trk 1 Vibes 43
Key C3
Cl: G
Res 16

Trk 1 Vibes 43
Key C3
Cl: F
Res 16

The cursor

In the menu area the Music Notation Display cursor is a rectangle enclosing a parameter or value.

In the notation area the cursor is a vertical line with two cross bars called range indicators. The range indicators enclose the octave where notes can be edited. When the cursor is on a note, crosshairs identify that note.

- You can move the cursor anywhere on the screen with the arrow keys.

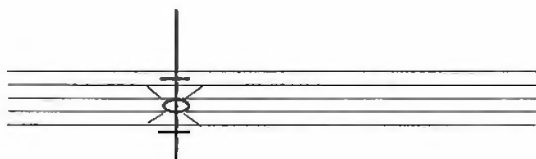
In the notation area, the cursor moves forward or backward in increments equal to the resolution setting.

If you press the right arrow key when the cursor is at the end of a staff, the screen pages ahead. If you press the left arrow key when the cursor is in the left menu area, the screen pages back.

- You can move the cursor anywhere on the screen by pointing with the trackball cursor and clicking.
- You can move the cursor between the menu area and the notation area by pressing Tab.

The position in either area is remembered and the cursor returns to that position when Tab is pressed again.

- You can move the cursor forward a selected note value by pressing R.



Notation area cursor

Entering music

You can use the Music Notation Display to enter the notes of a sequence entirely from the terminal. When you enter music in this way, you key in only what is essential and then use the Sequence Editor to bounce, cut and paste or transpose any duplicate sections.

Adding notes

You can enter notes using the terminal keyboard only.

1. Place the cursor at the correct measure and beat using the R key or arrow keys. (See "The cursor.")
2. Move the range indicators, if necessary, to enclose the desired pitch using the arrow keys.
3. Set the duration, if necessary, by typing the appropriate number as shown on the opposite page. You can type the number from either the main terminal keyboard or the keypad.
4. Enter the desired pitch by typing first an accidental, if needed, and then the pitch name as shown on the opposite page. Accidentals are necessary only for notes outside the key signature.

The new note appears on the staff, and the cursor advances by an amount equal to the duration of the note entered. The upper menu pitch and duration values change to reflect the new note. If the note is entered just before the end of the staff, the display scrolls ahead.

You can also enter notes using the trackball in conjunction with the terminal keys.

1. Enter the rhythm as explained above.
2. Enter the accidental as explained above.
3. Hold the ⌘ key while you click the large trackball button.

The note appears at the trackball cursor position; the cursor advances the value of the note entered.

Duration

number entered	note value
1	whole
2	half
4	quarter
8	eighth
6	sixteenth
3	thirty-second

A dot after the number produces the dotted note value. Double dotted time values may not be added.

Accidental

letter entered	accidental
Q	sharp
S	natural
Z	flat

Pitch

letter entered	note or rest
A-G	single note, cursor advances
Shift-A-G	single note, cursor does not advance
R	rest

Entering music (con't)

Adding chords

You add the notes of a chord in the same way as single notes except that you enter each pitch using the Shift key along with the letter name. If one of the notes in the chord is a very high or very low note, enter that note first using the procedure outlined in "Entering high and low notes" below.

1. Position the cursor using the arrow keys.
2. Enter the duration as described previously.
3. Enter the pitch by typing first an accidental, if needed, and then the pitch name while holding down the Shift key. Accidentals are necessary only for notes outside the key signature.

The new note appears on the staff. The cursor does not advance but remains on the new note.

You should enter the last note of a chord without using the Shift key so that the cursor advances for the next note.

Entering high and low notes

Although the cursor range is limited to four ledger lines above the staff and two below, you can add a higher or lower note.

1. Click directly above or below the cursor in the area where the note is to be entered.

The cursor moves to the area clicked.

2. Enter the note as usual.

You can also enter a high or low note by entering a note at the limit of the cursor range, deleting it and then entering the note you want.

1. Press the Shift key and enter the highest or lowest note the cursor allows.

The cursor moves higher or lower to center on the note you entered and does not advance.

2. Delete that note by pressing Delete.

The cursor remains centered on the note you deleted.

3. Enter the higher or lower note you want. It must be within a 4th of the deleted note.

4. Repeat the procedure if necessary.

Other methods for entering high and low notes include moving an existing note up or down (see "Moving notes" in the section "Editing notes") or entering the pitch in the upper menu area.

Entering music (con't)

Entering long notes

You can enter notes longer than a dotted whole note.

To see the beginning and end of a long note lasting several measures, however, you may need to set the Measures menu item to a larger number so that more measures are displayed.

1. Press Tab to move the cursor to the menu area.
2. Move the cursor to the Duration item, and set it for the note needed. You can use any fraction where the denominator is a note value (1, 2, 4, 8, 16 etc.) and the numerator is the total number of notes of that size required to equal the long note.
3. Press Tab to move back to the notation area.

The cursor returns to its former position.

4. Type in an accidental, if needed, and the pitch as described previously.

A note of the selected duration is entered.

You can also create a very long note by entering a dotted whole note and lengthening it using the right square bracket key (]). (See "Changing the duration of a note" in the section "Editing notes.") Set the resolution to a larger note value temporarily to speed up this process

Deleting notes

You can delete notes one at a time.

1. Place the cursor and crosshairs on the note to be deleted.
2. Press Delete.

If the deleted note is a single note, a rest of equal value takes its place. If the note deleted was a note in a chord, the cursor moves to the next lower note in the chord.

You can also delete notes using the trackball.

1. Roll the trackball until its cursor is on the note to be deleted.
2. Hold the Option key while you click the large trackball button.

Editing notes

When you add or edit notes from the Music Notation Display, the current sequence changes. If the sequence is also stored on disk, you should replace the stored version with the edited version (see "Storing, recalling and playback").

Changing the pitch

You can raise or lower the pitch of any note by placing the cursor on the desired note and typing P to move the note up a half-step at a time OR ; to move the note down a half-step at a time.

Changing the duration of a note

You can lengthen or shorten a note by placing the cursor on the note and typing] to lengthen the note by a value equal to the resolution OR [to shorten the note by a value equal to the resolution time value.

When you lengthen a note, any notes following it are not moved. The lengthened note may overlap or form a chord with the following note.

When you shorten a note, rests are added following the note. If you attempt to shorten a note to a time value smaller than the resolution setting, the note appears to have the time value determined by the resolution setting, but actually has a duration of zero and does not sound. Moving notes

Moving notes

You can move any note forward or backward in time by placing the cursor on the desired note and typing } to move the note forward in increments equal to the resolution setting OR { to move the note backward in increments equal to the resolution setting.

Justifying notes

At lower resolutions, a note recorded slightly early or late appears on the intended beat. At higher resolutions the same note may appear a 16th or 32nd off. You can justify such a note so that it begins exactly on the intended beat in any resolution.

1. Set the resolution to a value where the note appears on the intended beat.
2. Place the cursor on the note to be justified and type J to justify the note to the precise starting time displayed. Its duration remains the same as played.

Pitch changes

P	up
;	down

Duration changes

]	lengthen
[shorten

Position changes

}	forward
{	backward

Justification

J	justifies note
---	----------------

Editing tuplets

Tuplets are irregular groupings of notes such as triplets, quintuplets or sextuplets.

Displaying tuplets

Tuplets in a sequence are shown incorrectly when the sequence is first displayed. For example, with the resolution set to 16, an eighth-note triplet in 4/4 time appears as a sixteenth note followed by a pair of tied sixteenths followed by another sixteenth.

To display a tuplet in its correct notation:

- Set the resolution to the number of tuplet notes that would appear in one whole note. The following settings produce good results:

tuplet	time	click	resolution
	2/4, 4/4	1/8, 1/4, 1/2	24
	2/4, 4/4	1/4, 1/2	12
	2/4, 4/4	1/2	6
	3/4	1/8, 1/4	24
	3/4	1/4	12
	3/4	1/2	20
	2/4, 4/4	1/2	10
	2/4, 4/4	1/4, 1/2	20

The tuplet appears correctly although the rest of the notation is disturbed.

Editing or adding triplets

When a triplet is displayed correctly, it can be edited or notes can be added to it.

1. Display the triplet correctly as explained on the previous page.

The rest of the sequence appears incorrectly.

2. Enter the desired editing command, or enter new notes as desired.
3. Play the portion of the sequence containing the triplet to verify the changes.
4. Reset the resolution to its original setting.

The triplet appears incorrectly. It is, however, accurate in the sequencer and sounds correctly.